

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

SOLAS OLED LTD.,	§	
	§	
<i>Plaintiff,</i>	§	
	§	
v.	§	CIVIL ACTION NO. 2:19-CV-00152-JRG
	§	
SAMSUNG DISPLAY CO., LTD., et al.,	§	
	§	
<i>Defendants.</i>	§	

CLAIM CONSTRUCTION
MEMORANDUM AND ORDER

Before the Court is the Opening Claim Construction Brief (Dkt. No. 74) filed by Plaintiff Solas OLED Ltd. (“Plaintiff” or “Solas”). Also before the Court are the Responsive Claim Construction Brief (Dkt. No. 80) filed by Defendants Samsung Display Co., Ltd., Samsung Electronics Co., Ltd., and Samsung Electronics America, Inc. (“Defendants” or “Samsung”) as well as Plaintiff’s reply (Dkt. No. 82).

The Court held a hearing on April 7, 2020.

Table of Contents

I. BACKGROUND.....	2
II. LEGAL PRINCIPLES	3
III. AGREED TERMS.....	6
IV. DISPUTED TERMS.....	8
A. “transistor array substrate”	8
B. “project from a surface of the transistor array substrate”	15
C. “write current”	18
D. “configured to wrap around one or more edges of a display”	24
V. CONCLUSION.....	28

I. BACKGROUND

Plaintiff alleges infringement of United States Patents Nos. 6,072,450, 7,446,338 (“the ’338 Patent”), and 9,256,311 (“the ’311 Patent”) (collectively, “the patents-in-suit”). (Dkt. No. 74, Exs. A–B). The parties present disputed terms only as to the ’338 Patent and the ’311 Patent.

The ’338 Patent, titled “Display Panel,” issued on November 4, 2008, and bears a filing date of September 26, 2005. Plaintiff submits that the ’338 Patent relates to controlling amounts of electrical current flowing through individual light-emitting elements of a display. (*See* Dkt. No. 74, at 1–5.) Defendants submit that the relevant type of display is active-matrix organic electroluminescent (“AMOLED”) displays. (Dkt. No. 80, at 2.) The Abstract of the ’338 Patent states:

A display panel includes a transistor array substrate which has a plurality of pixels and is formed by providing a plurality of transistors for each pixel, each of the transistor having a gate, a gate insulating film, a source, and a drain. A plurality of interconnections are formed to project to a surface of the transistor array substrate and arrayed in parallel to each other. A plurality of pixel electrodes are provided for each pixel and arrayed between the interconnections on the surface of the transistor array substrate along the interconnections. Each of a plurality of light-emitting layers is formed on each pixel electrode. A counter electrode is stacked on the light-emitting layer.

The ’311 Patent, titled “Flexible Touch Sensor,” issued on February 9, 2016, and bears a filing date of October 28, 2011. Plaintiff submits that “[t]he ’311 patent specification describes touch sensors which are flexible and curve along with the contours of the display of the end device, such as a mobile phone.” (Dkt. No. 74, at 5.) The Abstract of the ’311 Patent states:

In one embodiment, an apparatus include a substantially flexible substrate and a touch sensor disposed on the substantially flexible substrate. The touch sensor comprising drive or sense electrodes made of flexible conductive material configured to bend with the substantially flexible substrate.

II. LEGAL PRINCIPLES

It is understood that “[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

“In some cases, however, the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015) (citation omitted). “In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the ‘evidentiary underpinnings’ of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.” *Id.* (citing 517 U.S. 370).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent’s claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* “One purpose for examining the specification is to determine if the patentee has limited the scope of the claims.” *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction analysis is substantially guided by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in

which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314–17. As the Supreme Court stated long ago, “in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office (“PTO”) understood the patent. *Id.* at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; see *Microsoft Corp. v. Multi-Tech Sys.*,

Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that “a patentee’s statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation”).

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319–24. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323–25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

III. AGREED TERMS

In their January 28, 2020 Joint Claim Construction and Prehearing Statement (Dkt. No. 65, at 1–2), their March 18, 2020 Joint Claim Construction Chart (Dkt. No. 83, Ex. A, at pp. 1 & 8 of

8), and Plaintiffs' April 15, 2020 Notice of Agreement on Previously Disputed Claim Construction Terms¹ (the "Notice of Agreement") the parties submitted the following agreements:

United States Patent No. 6,072,450	
<u>Term</u>	<u>Agreed Construction</u>
"active elements" (Claim 1)	"circuit elements that have gain or that direct current flow, e.g., transistors"
"wherein said at least one first electrode has a rough surface which is in contact with the said organic electroluminescent layer" (Claim 3)	"wherein said at least one first electrode is formed to have a substantially uneven surface in contact with the organic electroluminescent layer"
United States Patent No. 9,256,311	
<u>Term</u>	<u>Agreed Construction</u>
"computer readable non-transitory storage media" (Claim 7)	"a tangible computer-readable storage media possession structure, which (1) may be volatile, non-volatile, or a combination of volatile and non-volatile, but (2) may not be a propagating electrical or electromagnetic signal per se, including but not limited to semiconductor-based integrated circuits"

¹ The Notice of Agreement included two terms on which the parties now agree. One such term is included in Part III of this Order and the other term is included in Part IV of this Order.

United States Patent No. 7,446,338	
<u>Term</u>	<u>Agreed Construction</u>
“the pixel electrodes being arrayed along the interconnections between the interconnections on the surface of the transistor array substrate” (Claim 1) ²	“the pixel electrodes are arrayed along the interconnections and located between the interconnections, and the pixel electrodes are on the surface of the transistor array substrate”

IV. DISPUTED TERMS

A. “transistor array substrate”³

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“layered structure upon which or within which a transistor array is fabricated”	“a layered structure composed of a bottom insulating layer through a topmost layer on whose upper surface pixel electrodes are formed, which contains an array of transistors” ⁴

(Dkt. No. 65, at 2; Dkt. No. 74, at 7; Dkt. No. 80, at 4; Dkt. No. 83, Ex. A, at p. 4 of 8.) The parties submit that this term appears in Claim 1 of the ’338 Patent. (*Id.*)

² This term was included in the late-breaking Notice of Agreement. Having considered the parties’ briefing, the arguments from the parties at the claim construction hearing, and the relevant legal authorities, the Court finds that the parties’ agreed construction of this term comports with Court’s view and does not present risk of jury confusion as discussed in footnote 3 of this Order.

³ On April 15, 2020, Plaintiff filed the Notice of Agreement in which Plaintiff agreed to adopt Defendants’ proposed construction of this term. However, this late-breaking agreement comes to the Court after completion of the parties’ briefing, holding a claim construction hearing, and completing several drafts of this Order. The Court has substantive concerns about the parties’ agreement as to this particular term. The Court concludes that the inclusion of directional terms such as “upper” might lead to jury confusion. The Court also concludes that the referral to pixel electrodes in light of other claim language already addressing pixel electrodes would likely create uncertainty and confusion. For these reasons and other reasons set forth herein, the Court declines to accept the parties’ agreement as to this term.

⁴ Defendants’ response brief adds the word “pixel” to Defendants’ proposed construction. (*Compare* Dkt. No. 65, at 2 *with* Dkt. No. 80, at 4; *see* Dkt. No. 80, at 7 n.2.)

(1) The Parties' Positions

Plaintiff argues that “Samsung’s proposal departs from the plain meaning and incorporates specific features from one of the preferred embodiments disclosed in the specification.” (Dkt. No. 74, at 9.) Plaintiff also argues that “[t]here is no support in the specification, or elsewhere in the intrinsic or extrinsic record for *defining* the transistor array substrate by something else—having nothing directly to do with the transistor array—that is formed on top of it.” (*Id.*, at 10.) Further, Plaintiff argues that to the extent Defendants are relying on the “bottom emission type” embodiment in columns 10 and 11 of the ’338 Patent, “[Defendants’] proposed construction (requiring that the electrodes be formed on the ‘upper surface’ of the ‘topmost layer’) improperly excludes th[e] ‘top emission type’ embodiment from the claims.” (*Id.*, at 11 (citing ’338 Patent at 11:66–12:5).)

Defendants respond that this disputed term “does not have a customary meaning in the art,” “is a term specific to the ’338 patent,” and is defined by the ’338 Patent. (Dkt. No. 80, at 4.) Defendants argue that the claim language and the specification demonstrate that “the transistor array substrate must contain a plurality of transistors for each pixel (i.e., an array of transistors).” (*Id.*, at 4–5.) Defendants also argue that their proposed construction is consistent with the alternative embodiment cited by Plaintiff. (*See id.*, at 10.) Finally, Defendants argue that Plaintiff’s proposed construction “provides no basis to determine whether particular layers of a device are within or outside the ‘transistor array substrate,’ and as a result the scope of the claim could not be ascertained with reasonable certainty.” (*Id.*, at 12.)⁵

⁵ Defendants also submit that Plaintiff’s current proposal is contrary to Plaintiff’s past position in negotiations with another party (Dkt. No. 80, at 9), but the circumstances of this evidence are unclear. (*See* Dkt. No. 80, Ex. 4.) Further, even if this evidence is considered, Defendants fail to show that a party’s prior claim interpretation is limiting or probative as to the proper construction under the principles set forth in *Phillips*. 415 F.3d 1303.

Plaintiff replies that to the extent the specification sets forth a definition, the specification defines the particular “transistor array substrate 50,” not “transistor array substrate” generally. (Dkt. No. 82, at 1.) Alternatively, Plaintiff argues that Defendants’ proposal is inconsistent with the disclosures cited by Defendants, “add[ing] words like ‘topmost’ that never appear in the specification” and introducing elements, such as “electrodes,” that “are not part of element 50 and are only one of several structures located directly on element 50 in the Figure 6 embodiment.” (*Id.*, at 2 (emphasis omitted).)

(2) Analysis

Claim 1 of the ’338 Patent recites (emphasis added):

1. A display panel comprising:

a transistor array substrate which includes a plurality of pixels and comprises a plurality of transistors for each pixel, each of the transistors including a gate, a gate insulating film, a source, and a drain;

a plurality of interconnections which are formed to project from a surface of the transistor array substrate, and which are arrayed in parallel to each other;

a plurality of pixel electrodes for the plurality of pixels, respectively, the pixel electrodes being arrayed along the interconnections between the interconnections on the surface of the transistor array substrate;

a plurality of light-emitting layers formed on the pixel electrodes, respectively; and

a counter electrode which is stacked on the light-emitting layers,

wherein said plurality of transistors for each pixel include a driving transistor, one of the source and the drain of which is connected to the pixel electrode, a switch transistor which makes a write current flow between the drain and the source of the driving transistor, and a holding transistor which holds a voltage between the gate and source of the driving transistor in a light emission period.

Plaintiff’s expert has acknowledged that the term “transistor array substrate” does not have a specific, well-established meaning in the relevant art. (*See* Dkt. No. 80, Ex. 3, Feb. 6, 2020 Flasck dep., at 57:5–7 (“I’ve seen and heard in the industry people refer to transistor array substrates in a variety of contexts.”), 69:3–11 & 104:4–105:3; *see also id.* at 69:17–19 (“Q. There is no IEEE definition for ‘transistor array substrate,’ is there? A. I believe that is correct.”).)

The parties agree, however, that the word “substrate” has a well-established meaning in the relevant art. Plaintiff cites extrinsic dictionary definitions of “substrate.” (*See* Dkt. No. 74, Ex. 4, *The Authoritative Dictionary of IEEE Standards Terms* 1123 (7th ed. 2000) (SOLAS_SAMSUNG_0002233) (defining “substrate” in the context of “integrated circuit” as meaning “[t]he supporting material upon or within which an integrated circuit is fabricated or to which an integrated circuit is attached” or “[t]he base material upon which or in which a transistor or integrated circuit is fabricated; for example, materials such as glass-ceramic or silicon oxide”); *see also id.*, Ex. 5, *The New Oxford American Dictionary* 1688 (2d ed. 2005) (SDC0068828) (including a definition of “substrate” as meaning “a material that provides the surface on which something is deposited or inscribed, for example the silicon wafer used to manufacture integrated circuits”).)

These definitions are informative as to the meaning of “substrate.” *See Phillips*, 415 F.3d at 1318 (“Because dictionaries, and especially technical dictionaries, endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention.”). Construction of “substrate” within the construction of the disputed term is appropriate to clarify the meaning of “substrate” in this context. As set forth herein, the intrinsic evidence provides sufficient context for understanding the disputed term as a whole.

Turning to the specification, the parties have discussed disclosure regarding a “bottom emission type”:

The layer structure of the display panel 1 will be described with reference to FIG. 6.
...

The display panel 1 is formed by stacking various kinds of layers on the insulating substrate 2 which is optically transparent.

* * *

To use the display panel 1 as a bottom emission type, i.e., to use the insulating substrate 2 as the display screen, transparent materials are used for the gate insulating film 31, protective insulating film 32, and planarization film 33. The layered structure from the insulating substrate 2 to the planarization film 33 is called a transistor array substrate 50.

An insulating line 61 parallel to the scan line X is formed on the surface of the planarization film 33, i.e., on the surface of the transistor array substrate 50 between the red sub-pixel Pr and the green sub-pixel Pg.

* * *

The plurality of sub-pixel electrodes 20a are arrayed in a matrix *on the upper surface* of the planarization film 33, i.e., the upper surface of the transistor array substrate 50.

'338 Patent at 8:18–23, 10:42–51 & 11:50–52 (emphasis added).

The parties have also discussed disclosure of a “top emission type”:

To use the display panel 1 as a top emission type, i.e., to use the opposite side of the insulating substrate 2 as the display screen, a *reflecting film* having high conductivity and high visible light reflectance is preferably *formed between the sub-pixel electrode 20a and the planarization film 33*. Alternatively, the sub-pixel electrode 20a itself is preferably formed as a reflecting electrode.

Id. at 11:66–12:5 (emphasis added). If a reflecting film is thus present, then under Defendants' proposed construction the reflecting film would be part of the “transistor array substrate” because the reflecting film would be the layer upon which pixel electrodes are formed. Defendants' proposed construction is therefore consistent with both the “bottom emission type” and the “top emission type.” Plaintiff argues that the disclosure of “insulating line 61 . . . formed on the surface of the planarization film 33” ('338 Patent at 10:48–49) is inconsistent with Defendants' proposal of pixel electrodes formed on an upper surface of the transistor array substrate (Dkt. No. 74, at 10),

but Plaintiff fails to justify precluding multiple structures from being formed on a transistor array substrate.

Figure 6 of the '338 Patent provides context for the above-reproduced disclosures. Figure 6 of the '338 Patent, annotated to draw attention to the above-cited reference numerals 2, 33, and 50, is reproduced here:

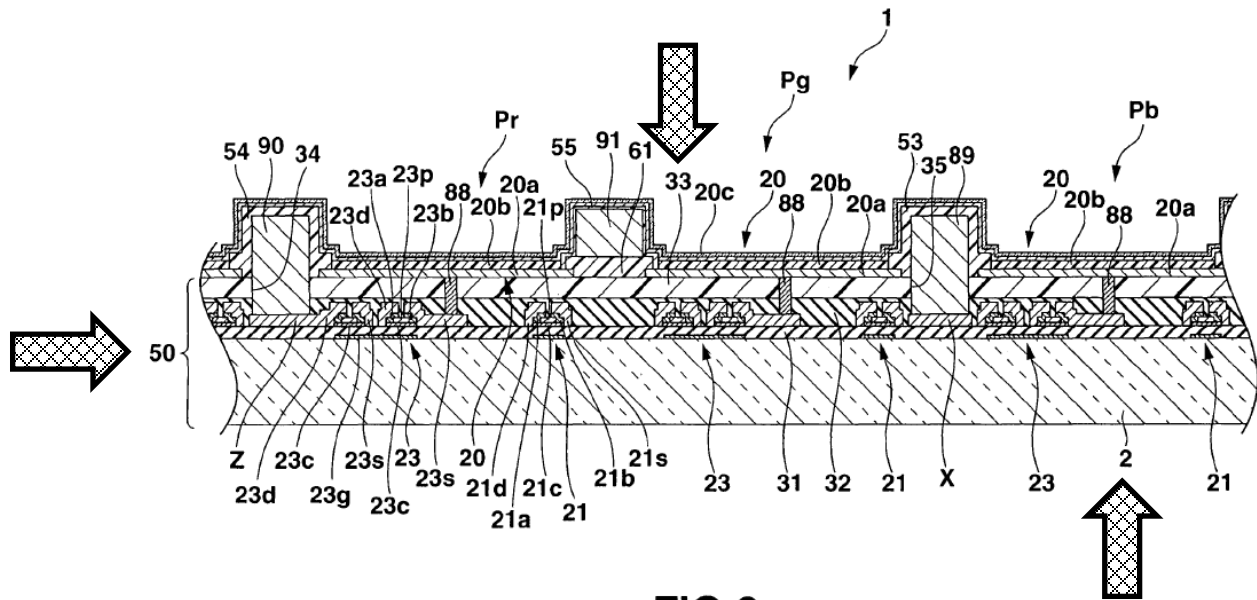


FIG.6

The specification thus discloses an “insulating substrate 2” that is one portion of a “transistor array substrate 50,” which includes other layers as well. ’338 Patent at 10:42–47 (reproduced above).

Nonetheless, “patent coverage is not necessarily limited to inventions that look like the ones in the figures.” *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007). Further, as Plaintiff points out, these disclosures appear in the Detailed Description of the Invention section of the specification, which begins by stating that “[t]he best mode for carrying out the present invention will be described below with reference to the accompanying drawings.” *Id.* at 4:40–44.

In some cases, disclosure of what a structure “is called” can be probative. *See Sinorgchem Co., Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007) (“the word ‘is’ . . . may ‘signify that a patentee is serving as its own lexicographer’”) (citations omitted); *see also Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1334 (Fed. Cir. 2009) (“the specification’s use of ‘i.e.’ signals an intent to define the word to which it refers”); *TriStrata, Inc. v. Microsoft Corp.*, 594 Fed. App’x 653, 655–56 (Fed. Cir. Dec. 4, 2014) (emphasizing that the specification uses the disputed term in conjunction with the phrase “is called”).

Here, however, the above-reproduced portion of the specification refers to what “is called a transistor array substrate 50.” *Id.* at 10:45–47 (emphasis added). The use of a particular reference numeral, “50” (*id.*), favors finding that this disclosure refers to a specific structure in a particular disclosed embodiment rather than to the meaning of “transistor array substrate” in general.

As to Defendants’ proposal of “contains an array of transistors,” the above-discussed evidence cited by Defendants does not compel requiring the array of transistors to be within, let alone entirely within, the substrate. To the extent that this is set forth in Figure 6 or in description in the specification of particular aspects of preferred embodiments, Defendants fail to justify importing this limitation into the claims. *See Phillips*, 415 F.3d at 1323; *see also MBO Labs.*, 474 F.3d at 1333 (quoted above). The opinion of Plaintiff’s expert that “[t]he transistor array substrate is a structure containing a transistor array,” cited by Defendants, does not compel otherwise. (*See* Dkt. No. 74, Ex. 1, Jan. 28, 2020 Flasck Decl., at ¶ 30.)

Finally, Defendants propose including limitations as to “pixel electrodes” and “transistors,” but Claim 1 of the ’338 Patent (reproduced above) separately recites limitations as to “a plurality of transistors for each pixel” and “a plurality of pixel electrodes for the plurality of pixels.” Defendants’ proposal as to these limitations would therefore tend to confuse rather than clarify the

scope of the claim. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1237 (Fed. Cir. 2016) (“Construing a claim term to include features of that term already recited in the claims would make those expressly recited features redundant.”).

The Court therefore hereby construes **“transistor array substrate”** to mean **“layered structure upon which or within which a transistor array is fabricated.”**

B. “project from a surface of the transistor array substrate”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“extend from an external surface of the transistor array substrate” ⁶	“extend above the upper surface of the transistor array substrate”

(Dkt. No. 65, at 2; Dkt. No. 74, at 13; Dkt. No. 80, at 12; Dkt. No. 83, Ex. A, at p. 4 of 8.) The parties submit that this term appears in Claim 1 of the ’338 Patent. (*Id.*)

(1) The Parties’ Positions

Plaintiff argues that “[n]othing in the intrinsic or extrinsic evidence cited by Samsung in connection with this term uses the word ‘above,’ or requires that the claimed ‘project[ing]’ occur in a specific direction.” (Dkt. No. 74, at 13.) Plaintiff also argues that “[t]he claim expressly refers to ‘a surface,’ suggesting there can be more than one,” and “[n]othing in the specification or elsewhere in the intrinsic record limits the claimed ‘a surface’ to a specific ‘the upper surface.’” (*Id.*, at 14.)

Defendants respond:

The parties’ dispute centers on whether this means that the interconnections extend beyond the boundary of the transistor array substrate, as Defendants propose and the ’338 patent describes, or whether the interconnections may be fully embedded within the transistor array substrate, as Solas proposes. The plain meaning of the claim language and the disclosures of the specification all support Defendants’ proposal.

⁶ Plaintiff previously proposed: “extend from a surface of the transistor array substrate.” (Dkt. No. 65, at 2; Dkt. No. 74, at 13.)

(Dkt. No. 80, at 12.)⁷

Plaintiff replies:

Solas believes that it is clear that the “surface” in its construction is an external surface of the transistor array substrate. However, if necessary to avoid the confusion reflected in Samsung’s brief or in certain questions asked at the deposition of Solas’s expert, Solas would not object to replacing the word “surface” in its proposed construction with “external surface.”

(Dkt. No. 82, at 4.)

(2) Analysis

Claim 1 of the ’338 Patent recites (emphasis added):

1. A display panel comprising:

a transistor array substrate which includes a plurality of pixels and comprises a plurality of transistors for each pixel, each of the transistors including a gate, a gate insulating film, a source, and a drain;

a plurality of interconnections which are formed to *project from a surface of the transistor array substrate*, and which are arrayed in parallel to each other;

a plurality of pixel electrodes for the plurality of pixels, respectively, the pixel electrodes being arrayed along the interconnections between the interconnections on the surface of the transistor array substrate;

a plurality of light-emitting layers formed on the pixel electrodes, respectively; and

a counter electrode which is stacked on the light-emitting layers,

wherein said plurality of transistors for each pixel include a driving transistor, one of the source and the drain of which is connected to the pixel electrode, a switch transistor which makes a write current flow between the drain and the source of the driving transistor, and a holding transistor which holds a voltage between the gate and source of the driving transistor in a light emission period.

Plaintiff’s expert interprets “a surface of the transistor array substrate” as encompassing interfaces between layers within the transistor array substrate. (See Dkt. No. 80, Ex. 3, Feb. 6,

⁷ Defendants also submit that Plaintiff’s current proposal is contrary to Plaintiff’s past position in negotiations with another party (Dkt. No. 80, at 15–16), but the circumstances of this evidence are unclear. (See Dkt. No. 80, Exs. 4 & 5.) Further, even if this evidence is considered, Defendants fail to show that a party’s prior claim interpretation is limiting or probative as to the proper construction under the principles set forth in *Phillips*. 415 F.3d 1303.

2020 Flasck dep. at 53:12–55:22 (“a surface is the interface between any of the layers within the transistor array substrate”); *see also id.* at 35:17–22, 37:21–38:4 & 45:15–20.) The opinions of Plaintiff’s expert are unpersuasive (*see* Dkt. No. 74, Ex. 1, Jan. 28, 2020 Flasck Decl., at ¶¶ 43–45), and Plaintiff fails to otherwise support such an interpretation. Indeed, such an interpretation would seemingly always be satisfied, as any structure would project from some part of some layer of the transistor array substrate. The Court therefore hereby expressly rejects any such interpretation. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (“claims are interpreted with an eye toward giving effect to all terms in the claim”).

Defendants’ proposed interpretation is also consistent with disclosures in the specification, in which the “planarization film 33” is an outer layer of the transistor array substrate (*see* ’338 Patent at 10:42–47 & 10:49–50):

The common interconnection 91 is formed by electroplating and is therefore formed to be much thicker than the signal line Y, scan line X, and supply line Z and *project upward from the surface of the planarization film 33.*

* * *

The thickness of the select interconnection 89 and feed interconnection 90 is larger than the total thickness of the protective insulating film 32 and planarization film 33 so that the select interconnection 89 and feed interconnection 90 *project upward from the upper surface of the planarization film 33.*

Id. at 10:54–58 & 11:36–41 (emphasis added). This understanding also comports with disclosure that the interconnections “also serve as partition walls to prevent leakage of an organic compound-containing solution.” *Id.* at 6:24–30; *see id.* at Fig. 6 (illustrating interconnections 89, 90, 91); *see also id.* at 12:62–13:3 & 22:62–66. Further, this understanding is consistent with cited extrinsic evidence that the word “project” means “extend outward beyond something else; protrude.” (Dkt. No. 74, Ex. 5, *The New Oxford American Dictionary* 1355 (2d ed. 2005) (SDC0068827).)

Finally, Defendants propose that this outer surface should be specified as an “upper” surface, but Defendants fail to persuasively support their proposal in this regard. Even assuming that a directional term such as “upper” is reasonably clear in the context of device fabrication, “upper” lacks sufficiently clear meaning in the context of a “display panel” as claimed in above-reproduced Claim 1 of the ’338 Patent. Moreover, Defendants fail to justify limiting the disputed term to one particular outer surface rather than any outer surface.

The Court accordingly hereby construes **“project from a surface of the transistor array substrate”** to mean **“extend beyond an outer surface of the transistor array substrate.”**

C. “write current”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
No construction required	“pull-out current”

(Dkt. No. 65, at 3; Dkt. No. 74, at 19; Dkt. No. 80, at 21; Dkt. No. 83, Ex. A, at p. 5 of 8.) The parties submit that this term appears in Claim 1 of the ’338 Patent. (*Id.*)

(1) The Parties’ Positions

Plaintiff argues that “[t]he disputed claim language—‘write current’—is precisely the kind of term that has a clear plain meaning on its face,” and the claim language explains the operation of the write current. (Dkt. No. 74, at 20.) Referring to the specification, Plaintiff argues that the term “write current” “is taught in embodiments to be a current that is supplied from outside of the pixel circuit (for example via a signal line) and is used to ‘write’ information, namely how brightly the pixel should emit light, that is stored in the pixel circuit.” (*Id.*; *see id.*, at 21.) Further, Plaintiff argues that “a POSITA reading the specification would understand that the ‘pull-out current’ described in connection with Figure 2 is given as an example of a ‘write current,’ and not as a definition or disclaimer of ‘write current’ or a requirement of what the ‘write current’ must be.”

(*Id.*, at 23.) Plaintiff argues that “[i]f there is any certain relationship to glean, then according to the patent specification, at most, some ‘write currents’ can also ‘pull out’ from the pixel circuit—and some ‘pull-out’ circuits can also be ‘write currents’” (*Id.*, at 25.) Plaintiff concludes that “in light of the variety of language used, there is little to nothing for a POSITA to take away from the instances in which the phrase ‘write current (pull-out current)’ is used to describe exemplary structures in the patent.” (*Id.*)

Defendants respond that “[t]he ’338 patent repeatedly and consistently defines ‘write current’ as ‘pull-out current.’” (Dkt. No. 80, at 21.) Defendants also argue that “[t]here is no apparent dispute that, in the operation of the devices disclosed in the ’338 patent, write current is pull-out current,” and “there is no disclosure in the ’338 patent of write current that is not pull-out current.” (*Id.*, at 23 & 24.) Defendants urge that “[t]he definition of the ‘write current’ as pull-out current is not merely an aspect of a preferred embodiment, it is a foundational feature of the ’338 patent’s circuit structure.” (*Id.*, at 25.) Defendants submit that “the very portion of the specification that the applicants called out to support their amended claim language explicitly provides that write current refers to pull-out current.” (*Id.*) Finally, Defendants argue that “Solas cannot argue that no construction is required when it takes the position that ‘write current’ does not mean what is described in the specification and prosecution history of the ’338 patent.” (*Id.*, at 26.)

Plaintiff replies that “[a]s confirmed by the unrebutted opinion of Solas’s expert, one skilled in the art would understand that these uses of the phrase ‘write current (pull-out current)’ are identifying an *example* of a write current, depicted in Figure 2 of the ’338, not providing a *definition* of ‘write current.’” (Dkt. No. 82, at 6 (citing Dkt. No. 74, Ex. 1, Jan. 28, 2020 Flasck Decl., at ¶¶ 64–65).)

(2) Analysis

Plaintiff submitted at the April 7, 2020 hearing that the parties agree that a “write current” is a current that writes information. (*See* Dkt. No. 74, Ex. 1, Flasck Decl., at ¶ 62.)

The parties disagree as to the meaning of “write current” in the context of the claim at issue. Claim 1 of the ’338 Patent recites (emphasis added):

1. A display panel comprising:
 - a transistor array substrate which includes a plurality of pixels and comprises a plurality of transistors for each pixel, each of the transistors including a gate, a gate insulating film, a source, and a drain;
 - a plurality of interconnections which are formed to project from a surface of the transistor array substrate, and which are arrayed in parallel to each other;
 - a plurality of pixel electrodes for the plurality of pixels, respectively, the pixel electrodes being arrayed along the interconnections between the interconnections on the surface of the transistor array substrate;
 - a plurality of light-emitting layers formed on the pixel electrodes, respectively; and
 - a counter electrode which is stacked on the light-emitting layers,wherein said plurality of transistors for each pixel include a driving transistor, one of the source and the drain of which is connected to the pixel electrode, *a switch transistor which makes a write current flow between the drain and the source of the driving transistor*, and a holding transistor which holds a voltage between the gate and source of the driving transistor in a light emission period.

Defendants cite more than a dozen instances in which the specification refers to “write current (pull-out current).” *See* ’338 Patent at 15:34–37 (“As shown in FIG. 2, a write current (pull-out current) having a current value corresponding to the gray level is supplied from the data driver to the signal lines.”); *see also id.* at 15:37–41, 15:43–45, 15:45–54, 15:54–58, 16:11–13, 16:38–41, 16:42–46, 16:48–50, 16:50–59, 16:59–63, 17:17–19, 17:53–55 & 17:59–62.

During prosecution, the patentee explained as follows when amending the claim to incorporate limitations from a dependent claim:

Claim 1 has been amended to incorporate the subject matter of claim 2, which has been canceled, and claim 3 has been amended to depend from amended independent claim 1 instead of from (now canceled) claim 2. In amending claim 1, the phrase

“a switch transistor which supplies a write current” in original claim 2 has been changed to “a switch transistor which makes a write current flow.” See, for example, Fig. 2 and page 41, lines 20–25 in the specification.

(Dkt. No. 80, Ex. 2, Feb. 25, 2008 Amendment, at 12.) The passage at “page 41, lines 20–25” of the application corresponds to column 15, lines 37–41 of the issued ’338 Patent (Dkt. No. 80, at 25 (citing Dkt. No. 80, Ex. 8)), which discloses:

In the pixel circuit P_{ij} , the *write current (pull-out current)* to the signal line Y1 flows from the feed interconnection 90 and supply line z, through the drain-to-source path of the driving transistor 23 and the drain-to-source path of the switch transistor 21.

’338 Patent at 15:37–41 (emphasis added); *see id.* at 15:42–54 (additional references to “write current (pull-out current)” immediately following the above-reproduced disclosure).

Thus, when amending the portion of the claim regarding the write current, the patentee cited disclosure that refers to the write current being a pull-out current. The prosecution history is thus consistent with reading the above-cited disclosures in the specification as reflecting that the patentee understood the “write current” to be a pull-out current.

Plaintiff submits authority that courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment, unless the specification makes clear that ‘the patentee . . . intends for the claims and the embodiments in the specification to be strictly coextensive.’” *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005) (quoting *Phillips*, 415 F.3d at 1323).

In the present case, however, the Court finds that the patentee defined the term “write current” “by implication.” *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) (“Even when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or

ascertained by a reading of the patent documents.”); *see Phillips*, 415 F.3d at 1321 (citing *Irdeto*); *see also Trs. of Columbia Univ. in City of N.Y. v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016) (citing *Phillips*; citing *Irdeto*); *Nystrom v. TREX Co., Inc.*, 424 F.3d 1136, 1144–45 (Fed. Cir. 2005) (construing “board” to mean “wood cut from a log,” noting that in the intrinsic record the patentee “consistently used the term ‘board’ to refer to wood cut from a log,” and stating that the patentee “is not entitled to a claim construction divorced from the context of the written description and prosecution history”).

Plaintiff cites a portion of the specification in which a pull-out current is disclosed “as the write current”:

When the select driver selects the scan lines X_1 to X_m , the data driver *supplies a pull-out current (current signal) as the write current* to all the signal lines Y_1 to Y_n through the drain-to-source paths of the driving transistors 23.

’338 Patent at 16:23–27 (emphasis added). This disclosure, however, is consistent with the “write current” being a pull-out current. Further, Plaintiff cites no disclosure of any other type of current that the “write current” could be.

Plaintiff also cites two instances in which the specification refers to a “write current” differently, disclosing:

While the select driver is selecting the scan lines X_1 to X_m , a data driver supplies a *write current (current signal)* to all the signal lines Y_1 to Y_n through the drain-to-source paths of the driving transistors 23 of a predetermined row.

* * *

The resistance of an interconnection formed from a thin film which forms the gate electrode or the source/drain electrode of a thin-film transistor is so high that the *write current (driving current)* cannot be supplied to the n organic EL elements 20. In this embodiment, the feed interconnections 90 are formed from a conductive layer different from the gate electrodes or the source/drain electrodes of thin-film transistors of the pixel circuits $P_{i,1}$ to $P_{m,n}$. For this reason, the voltage drop by the feed interconnections 90 is small. Even in a short selection period, the *write current (pull-out current)* can sufficiently be supplied without any delay.

'338 Patent at 14:59–63 & 17:44–55. In the second of these disclosures, the same embodiment refers to “write current (pull-out current).” *Id.* at 17:44–55. As to the first of these disclosures, the specification elsewhere refers to “pull-out current (current signal)”:

When the select driver selects the scan lines X_1 to X_m , the data driver supplies a pull-out current (current signal) as the write current to all the signal lines Y_1 to Y_n through the drain-to-source paths of the driving transistors 23.

Id. at 16:24–27. The disclosure of “write current (current signal)” (*id.* at 14:59–63) can therefore be readily reconciled with the above-cited disclosures of “write current (pull-out current).”

The patentee’s definition of “write current” as meaning “pull-out current” is consistent with the context in which Claim 1 of the '338 Patent uses the term “write current.” Claim 1 recites a “driving transistor” connected to a pixel electrode and “a switch transistor which makes a write current flow between the drain and the source of the driving transistor.” The claim then recites “a holding transistor which holds a voltage between the gate and source of the driving transistor in a *light emission period*.” The specification refers to a “write current (pull-out current)” in the context of a selection period, and the driving current during the light emission period is determined by the pull-out current during the selection period. *See* '338 Patent at 16:5–13 & 17:14–19; *see also id.* at 16:38–17:25. Plaintiff’s expert acknowledged during deposition that when the disclosed switching transistor is on, current is being pulled out of the circuit, to a sink, rather than flowing through the electroluminescent element. (*See* Dkt. No. 80, Ex. 3, Feb. 6, 2020 Flasck dep. at 21:6–24:22; *see also* Dkt. No. 74, Ex. 1, Jan. 28, 2020 Flasck Decl., at ¶¶ 21–22.)

Thus, the intrinsic and extrinsic evidence supports Defendants’ proposed construction, and the opinions of Plaintiff’s expert to the contrary are unpersuasive. (*See* Dkt. No. 74, Ex. 1, Jan. 28, 2020 Flasck Decl., at ¶ 62 (“a current that is used to write”); *see also id.* at ¶¶ 61–66.)

The Court accordingly hereby construes **“write current”** to mean **“pull-out current.”**

D. “configured to wrap around one or more edges of a display”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
No construction required	“wrapped around one or more line segments where two surfaces of a display intersect”

(Dkt. No. 65, at 3; Dkt. No. 74, at 26; Dkt. No. 80, at 27; Dkt. No. 83, Ex. A, at p. 6 of 8.) The parties submit that this term appears in Claims 1 and 7 of the ’311 Patent. (*Id.*, at pp. 6–7 of 8.)

(1) The Parties’ Positions

Plaintiff argues that “nothing in the intrinsic record of the patent gives [the disputed term] any other meaning and certainly does not go nearly as far as Samsung asks this Court to now go in narrowing the meaning of the claimed term ‘edges.’” (Dkt. No. 74, at 27.) Plaintiff also argues that “[f]ar from remaining consistent with the examples in the specification, Samsung’s proposed injection of these limiting terms actually creates tension with embodiments taught in the patent specification.” (*Id.*, at 28.)

Defendants respond: “Defendants’ proposed construction is the plain meaning of the claim language in the art of the ’311 patent. The term ‘edge’ has a plain and ordinary meaning in a technical context when referring to three-dimensional objects. It refers to a line where two surfaces intersect.” (Dkt. No. 80, at 27 (citations omitted).) Defendants also argue that “the ’311 patent makes clear that ‘a curved surface’ is different from an edge.” (*Id.*, at 29 (citing ’311 Patent at 7:55–58).) Further, Defendants argue that “[t]he applicants added the ‘wrap around an edge’ limitation during prosecution to overcome repeated rejections of broader prosecution claims that had also encompassed the separate set of embodiments in which touch sensors were configured to wrap around ‘a curved surface.’” (Dkt. No. 80, at 29 (citations omitted).) “Finally,” Defendants argue, “Defendants’ construction does not limit the claim to ‘sharper edges,’ contrary to Solas’s

assertion,” because “[a] rounded edge differs from a curved surface in that it joins two distinct surfaces.” (*Id.*, at 30.)

Plaintiff replies that “[n]othing in the patent says that edges cannot be curved or that curved surfaces cannot have edges.” (Dkt. No. 82, at 8.) Plaintiff also argues that, for anything less than a perfectly sharp edge, Defendants’ proposal of an “edge” being an intersection of plane faces would refer to a line of intersection that is outside of the device. (*Id.*, at 10.)

(2) Analysis

The disputed term appears in Claims 1 and 7 of the ’311 Patent. Claim 1 of the ’311 Patent, for example, recites (emphasis added):

1. An apparatus comprising:
 - a substantially flexible substrate; and
 - a touch sensor disposed on the substantially flexible substrate, the touch sensor comprising drive or sense electrodes made of flexible conductive material configured to bend with the substantially flexible substrate, wherein:
 - the flexible conductive material of the drive or sense electrodes comprises first and second conductive lines that electrically contact one another at an intersection to form a mesh grid; and
 - the substantially flexible substrate and the touch sensor are *configured to wrap around one or more edges of a display*.

The patentee added the disputed term to these claims by amendment. (*See* Dkt. No. 80, Ex. 9, June 19, 2015 Response, at 1–3.) Because the claim recites that the substantially flexible substrate and the touch sensor are configured to “wrap around” one or more edges of a display, the claim inherently recites that the display is three-dimensional. Defendants cite dictionary definitions of “edge” in three-dimensional contexts as meaning “the line along which two surfaces of a solid meet” and “a line along which two plane faces of a solid intersect.” (Dkt. No. 80, Ex. 11, *Concise Oxford English Dictionary* 455 (12th ed. 2011); *id.*, Ex. 12, *McGraw-Hill Dictionary of Scientific and Technical Terms* 641 (5th ed. 1994).) One of these dictionaries also defines “edge” as meaning “the outside limit of an object, area, or surface.” (*Id.*, Ex. 11, at 455.)

Plaintiff cites an *Inter Partes* Review (“IPR”) petition in which Defendant Samsung Display Co., Ltd. argued:

1. “edges of a display”

First, the ’311 patent does not expressly define what it means to wrap around an “edge of a display.” It describes “particular embodiments” in which a touch sensor “may wrap around *an edge 603 of example mobile phone 600*,” and “other particular embodiments” in which the touch sensor is “wrapped around *a curved surface*.” Ex. 1001 [’311 Patent], 7:55–60 (emphasis added). It further states that the sensor:

may be wrapped over surfaces that are substantially perpendicular to each other or, if there is no substantial distinction between surfaces (such as, for example, a pebble-shaped or curved device), and angle of deviation between the surfaces of 45 degrees or greater.

Id., 7:61–65.

For this petition, however, the Board need not resolve whether an “edge of a display” must be an edge between “flat portions of surfaces” (such as “substantially perpendicular” surfaces) or if the claims may additionally encompass a sensor that is “wrapped around a curved surface.” As explained below, each prior art combination (Kuriki–Mikladal and Moran–Joo) discloses a touch sensor wrapped around an edge between substantially perpendicular surfaces of a display, and therefore teaches this limitation under any of these interpretations.

(Dkt. No. 74, Ex. 8, Petition for Inter Partes Review, at 12–13.) Plaintiff fails to demonstrate any inconsistency between these arguments and Defendants’ arguments in the present case. Indeed, the IPR petition urged that the Board need not resolve the proper scope of the term “edge of a display.” (*Id.*)

As to the proper construction, the specification discloses:

FIG. 7 illustrates an example mobile telephone that incorporates a flexible touch-sensitive apparatus. In the example of FIG. 7, example mobile telephone 600 incorporates a *touch-sensitive apparatus 612 wrapped around an example display 613*. Substrate 602 may include or have attached to it tracking areas, which may include tracks providing drive and sense connections to and from the drive and sense electrodes of touch-sensitive apparatus 612. In particular embodiments, an electrode pattern of touch-sensitive apparatus 612 made from metal-mesh

technology with a copper, silver, or other suitable metal mesh, as described above. Substrate 602 may have the electrode pattern disposed on a surface. Substrate 602 and the conductive material of the electrode pattern may be flexible, enabling the conductive material to *wrap around the left and right edges of the surface to left-side and right-side surfaces*. For *sharper edges (e.g., with radii of less than 1 mm)*, the flexible conductive material of the electrode pattern may be thicker or wider at the sharper edges than at the flat portions of surfaces. In particular embodiments, the electrode pattern may wrap around an *edge 603* of example mobile phone 600. *In other particular embodiments, touch-sensitive apparatus 612 may be wrapped around a curved surface*. The curved surface may be curved in one dimension or in two dimensions. As an example and not by way of limitation, touch-sensitive apparatus 612 may be wrapped over surfaces that are substantially perpendicular to each other or, if there is no substantial distinction between surfaces (such as, for example, *a pebble-shaped or curved device*), an angle of deviation between the surfaces of 45° or greater. Although this disclosure describes and illustrates a particular use of touch-sensitive apparatus 612 in a particular device, this disclosure contemplates any suitable use of touch-sensitive apparatus 612 in any suitable device.

'311 Patent at 7:37–8:2 (emphasis added). This disclosure regarding “sharper edges” having a particular radius of curvature (*id.* at 7:52) weighs against Defendants’ proposal of interpreting “edges” as referring to “line segments” at an intersection. (*See* Dkt. No. 82, at 10.)

Nonetheless, the patentee distinguished between wrapping around an “edge” and wrapping around “a pebble-shaped or curved device.” *See id.* at 7:55–65. The disputed term should therefore be construed in accordance with this distinction, set forth by the patentee, that an “edge” is an intersection between surfaces. *See id.*; *see also id.* at Fig. 7. To be clear, however, although the term “edge” requires an intersection, this limitation specifies no particular angle of intersection but instead simply requires two or more surfaces that have an identifiable intersection. *See id.* at 7:62–64 (referring to “pebbled shaped or curved device” as being an example in which “there is no substantial distinction between surfaces”).

Finally, at the April 7, 2020 hearing, Plaintiff urged that the term “edge” does not necessarily refer to where surfaces meet but rather may refer to a boundary of a single surface. Plaintiff fails to identify any intrinsic evidence to support this argument. The Court has found an

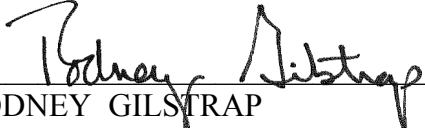
instance in which the specification discloses that “[b]ond pads 16 may be located along one or more *edges* of the substrate, outside the touch-sensitive area(s) of touch sensor 10.” ’311 Patent at 5:45–47 (emphasis added). To whatever extent this might be interpreted as using “edge” to refer to a boundary of a single surface, however, the above-cited disclosures demonstrate that the patentee “edge” in the context of the disputed term to refer to an intersection between surfaces. This understanding also comports with the language of the disputed term itself, which refers to wrapping “around” one or more edges of a display.

The Court accordingly hereby construes **“configured to wrap around one or more edges of a display”** to mean **“configured to wrap around one or more intersections between two or more surfaces of a display.”**

V. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

So ORDERED and SIGNED this 17th day of April, 2020.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE